

# THE FARMER'S TEN BEST BIRD FRIENDS.

They are the night hawk, killdeer plover, chimney swift, bluebird, downy woodpecker, phoebe, chickadee, barn swallow, purple martin and chipping sparrow

By  
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PHOTOGRAPHS FROM U.S.  
BIOLOGICAL SURVEY



AN EMINENT American ornithologist recently was asked to name the ten most beneficial birds of the United States. Here is his answer: Nighthawk, killdeer plover, chimney swift, bluebird, downy woodpecker, phoebe, chickadee, barn swallow, purple martin and chipping sparrow.

Having given the names of the ten birds over whose good deeds man should rejoice the ornithologist said, "But the list is longer. There are other birds and many of them, that work as hard or nearly as hard for man as those which I have named. Between 30 and 40 species there is small room for choice, but let the ten stand because the list perhaps cannot be improved upon."

Later the scientist wanted to hedge a little, for he said that there were some birds of prey which at least should have a place side by side with the familiars of orchard and garden to which he had given first rank. The cause of the birds of prey, however, has been pleaded before. The barn owl, the sparrow hawk and some others have been given their credit marks, but it is to be doubted, perhaps, if anything which can be said in behalf of a predatory one which occasionally picks up a chicken will serve to save its life when it is caught in the act of larceny. Not one of the birds in the Table of Ten is a thief. Honest, well-meaning, cheerful, and for the most part neighborly, they go through their lives working, which means eating, in order that man may fully reap what he has sown.

It is admittedly probable that some close students of the habits of birds may dispute the accuracy of the list as it is given, but it is not likely that anyone who has watched the daily operations of these friends in feathers from night-hawk to chipping sparrow will be able to prove that so much as one black mark should be entered on the daily records of their lives.

By their appetites ye shall know them. A bird is good or bad from the agriculturist's viewpoint according to what and how much it eats. This is a plain tale of the birds' bill of fare. It is lucky, perhaps, for the songsters, as well as for the tuneless ones, that the birds of the best habits of life are well known by sight to all Americans. The trouble that the bird protectors have found lies almost wholly in the fact that the habits of birds are not as well known as the birds themselves.

It was Dr. A. K. Fisher of the Biological Survey who named the ten most useful birds. He is in charge of "economic investigations" in the Bureau of the Biological Survey of the Department of Agriculture. In the bureau are kept the bird records. The papers in the pigeon holes in part read like the catalogues of a seed store and the collection lists of an entomologist. One can say of the birds that seeds and insects "form the chief of their diet."

To go to the mammals for a figure of speech it has taken years of closest work and field work to separate the sheep from the goats. In the bird world there are many more sheep than there are goats, but the job of separation has been hard. In the little flock of best friends of the farmer there are only two birds which, perhaps, are not well known to all suburban dwellers. The two are the killdeer plover and the yellow-billed cuckoo. The killdeer, known to everybody, of course is not a hawk at all, and the name by which it is known in the Northern states, has hurt it. Paraphrasing it might be said, "Give a bird a bad name and it will shoot it." In the Southern states the killdeer is known as the bull-bait. In the fall and winter it is killed ruthlessly and to no purpose except that of so-called sport, for it is useless, or virtually useless as food.

Nighthawks are wholly insectivorous. They do no damage to crops. F. E. L. Beal, who has made field studies for the Biological Survey of the dietary of virtually all the commoner birds, says of the food of the nighthawk, "True bugs, moths, flies, grasshoppers and crickets are important elements of its food. Several species of mosquitoes, including the transmitter of malaria, are eaten. Other well-known pests consumed by the nighthawk are Colorado potato beetles, cucumber beetles, rice, clover-leaf and cotton-boll worms, bill bugs, bark beetles, squash bugs and moths of the cotton worm."

The killdeer plover is one of the noisy birds. A part of its Latin name is "Vociferus," which speaks for itself. While the killdeer ordinarily is accounted a game bird it is poor eating. The good that it does should save it from persecution, but gunners are not apt to discriminate, and so the killdeer frequently suffers. This bird lives in the open country. More than 99 per cent of its food consists of animal matter. The record shows: Beetles, 37.06 per cent; other insects, as grasshoppers, caterpillars, ants, bugs, caddis flies, dragon flies and two-winged flies, 39.54 per cent; and other invertebrates as centipedes, spiders, ticks, oyster worms, earthworms, snails, crabs and other crustaceans, 21.12 per cent. Vegetable matter composes 2.28 per cent of the total food, and is chiefly made up of weedseeds, such as buttonweed, smartweed, foxtail grass and nightshade. The alfalfa weevil, a new and de-

structive pest, has been proved to be a favorite food for the killdeer.

The chimney swift, almost always called the chimney swallow, although it is not a swallow at all, is sometimes looked upon as a nuisance because in the summer time it is apt to make more or less of a racket in the chimneys leading from bedrooms in which tired folk are trying to sleep. This swift-winged bird never lights upon the ground, a tree or a building. Its only resting place is on sooty bricks in the dark interior of a chimney or on the inner wood of some hollow tree in a wilderness that knows no chimney. All of the swift's food is captured on the wing. It eats thousands of mosquitoes, gnats and other noxious winged insects. It hunts from daylight to dark, and all its hunting is in the interest of man. The swift gathers its nesting material while on the wing. It has a curious habit, while in flight, of nipping off the tips of dead twigs, and so quickly and neatly is the thing done that the eye barely can follow the operation.

The bluebird, with its "violet of song," is loved wherever it is known. Luckily bluebirds are prolific creatures, for about twenty years ago a severely cold winter made such inroads on the tribe that it was feared the birds might never come back into their own. They came back, and now there are as many as ever and they are continuing a warfare against man's enemies with no pacifist in the land to interpose objection.

The bluebird is given third place in the list of the ten most beneficial birds. Science is cruel in order to be kind. Nearly nine hundred bluebirds met death so that the scientists might prove that they were useful to man. An examination of the stomachs of the martyrs showed that 68 per cent of the food "consists of insects and their allies, while the other 32 per cent is made up of various vegetable substances found mostly in the stomachs of birds taken in winter."

It is a happy thing for the bluebird that the scientists are able to set it down that "so far as its vegetable food is concerned the bird is positively harmless." The bluebird is a beauty. It is neighborly and kindly disposed. Its appealing spring-time note sounds far away, for the bluebird is a ventriloquist. It perches in a tree at the doorstep, but seemingly calls to you from the skies.

The downy woodpecker is the tiniest member of the woodpecker family which spreads itself pretty well over the United States. The downy eats everything in the bug and insect line from tiny ants to big caterpillars. Frequently these little woodpeckers are shot by orchardists because they appear to be injuring the trees. This is what Dr. Glover, an entomologist of the Department of Agriculture, has said concerning this matter of suspicion:

"On one occasion a downy woodpecker was observed making a number of small, rough-edged perforations in the bark of a young shade tree. Upon examining the tree when the bird had flown away, it was found that wherever the bark had been injured the young larvae of the wood-eating beetles had been snugly curled underneath and had been destroyed by the birds. The hairy woodpecker, a bigger brother of the downy, also is a beneficial bird, but the little one rather outdoes the big one in the work of well-doing.

The phoebe is the true harbinger of spring, even if the robin and the bluebird more frequently are given the honor. The phoebe belongs to the tribe of flycatchers and it takes virtually all of its food on the wing. It cannot come north until spring comes as its companion, because its food does not fly about in cold weather.

I have seen four young phoebes sitting side by side on the limb of a tree while the mother bird for two hours struck down quarry with which to feed them. Not a mistake did she make, and she played no favorites. Out from the limb she would dart, there would be a click of the bill and an insect tidbit would be fed to one of the fledglings. The young were fed one after another, the mother bird apparently remembering which one had been given the last mouthful.

F. E. L. Beal of the Biological Survey says all that is necessary to prove the phoebe's case:

"There are but few birds in the United States more endeared to the rural and village population than the common phoebe. Its habit of associating itself with man and his works, its trustful disposition and the fact that it never is seen to prey upon any product of husbandry have rendered it almost sacred."

The chickadee appealed to Ralph Waldo Emerson. The bird has a philosophy of its own and Emerson recognized it. It stays in the north country all winter, for no cold can shackle its activities nor chill its cheer. Emerson met the chickadee on a blustery winter day and wrote:

Here was this atom in full breath  
Hurling defiance at vast death;  
This scrap of valor just for play  
Fronts the north wind in waistcoat gray.

A favorite food of the chickadee consists of the eggs of the two species of tent caterpillar moths which are among the most destructive of insects. In winter it eats larvae, chrysalids and eggs of moths, varied by a few seeds. The bird's bill of fare is made up for the main part of insects, nearly all of which are known to the farmer or fruit raiser as pests.

The barn swallow and the purple grackle, cousin swallows, are familiar to all dwellers in the country. There are five other common species of swallows found within the United States and all of them are of beneficial life. Swallows take all of their food, or nearly all of it, while on the wing. Virtually all of the insects which they destroy are either injurious or annoying, and the government scientists say that the numbers of the pests "destroyed by swallows are not only beyond calculation, but almost beyond imagination."

Wordsworth might have asked the American cuckoo, as he did its European cousin, whether he should call it a bird or but a wandering voice. There are two fairly abundant species of cuckoos in America, the yellow-billed and the black-billed. Their habits are much alike. These two birds are ventriloquists. One hears their voices where they are not. The cuckoos thread their way through the tangles of branches, gliding after the manner of ghosts. The bird eats what most other birds disdain. It has a special fondness for the great hairy destructive caterpillars, and when it finds a nest of the tent caterpillars it will not move on until the destruction of the pests and their home is complete. The cuckoo frequently is called the rain crow. It has no place as a weather prophet, however, for it is apt to be especially vociferous in the driest times.

In the list of the ten best birds there is only one bird of the dooryard. These little birds nest in the currant bushes, in the vines which clamber over the porch or in the hedges which bound the dooryard domain. Sparrows are known as seed eaters, and this might carry an implication that they are destroyers of grain. Some of them are, but we have the scientists as witnesses that the food habits of the chipping sparrow, the bird which comes to your doorstep for crumbs, are all good. It has been written of it that it is "well worthy of the welcome and protection which it everywhere receives."

It must not be thought because ten birds have been named as the best friends of the farmer that there are not scores of others whose daily work is for the good of man. The ten excel, but the others strive with them throughout their short lives to work as well as in them lies for the good of man who too often, misunderstanding their intentions, becomes their persecutor.

## SAFE FROM BARBED WIRE.

One of the most trying tasks incident to trench fighting has been considerably lightened by the appearance in the British trenches of gloves made of a fabric which is said to be impervious to barbed wire points, says Popular Science Monthly. The fabric is made up into mittens, with the first finger and thumb separate. The fabric is waterproof, and in addition the gloves are insulated for gripping electrically charged wires.

The same material is applied to the manufacture of sleeping bags, which, when opened, may be thrown over a barbed wire entanglement to allow a soldier to climb over the sharp points without injury. When made up into vests or tunics the fabric is strong enough to turn shrapnel splinters or even a bullet when it has lost part of its momentum. The interlining is antisepticized, so that if a bullet goes through it takes into the wound enough antiseptic wool to prevent poisoning.

The materials used in the manufacture of this remarkable fabric have been sedulously kept secret this far.

## POSTSCRIPTS

The phonograph and telephone are employed in a South Carolina inventor's automatic fire alarm that calls up a central operator and tells her where a blaze is starting.

Mechanism consisting of a series of jointed strips or lowering several ventilators at once by manipulating a single lever.

An electric light reflector has been invented that can be used for either direct or indirect lighting.

# WASHINGTON GOSSIP

## Two Sons of a Cabinet Member Learning a Trade

WASHINGTON.—"Joe and Jim? Oh, they're good fellows. Both of them work 'on the floor,' and work hard, too. They seem to like it. They'll get better jobs soon, if they stay around here." This from a veteran out at the Washington Steel and Ordnance company, at Gleason Point, concerning Joseph B. Wilson and James Wilson. They would have no trouble getting a recommendation from their "section boss" any time they wanted another job.

They do not need—in fact, have never availed themselves of any "pull" from their father, Joseph Baughman Wilson, secretary of labor.

The fact that they are sons of a cabinet member does not disturb them one bit, as in overalls, they carry steel bars around and "do anything that comes handy."

That is about the most definite description of their present work obtainable. Officially they are classified as machinists' helpers, and they are working to be full-fledged machinists.

This is not the first "job" for either of the young men. The elder, Joseph, was graduated from Central high school in 1914, and since then has "carried a chain" for surveyors in the geological survey, and has worked with an automobile magazine. He has been attending Georgetown Law school in the evening.

James, aged eighteen, felt the call of his father's farm, up at Blossburg, Pa., even before he quit Central high. He is an expert in bees, and had a lot of hives on his father's farm. But he wanted to "learn a trade," so he and his brother both set out to do so.

The secretary is delighted. He is a believer in vocational education—and believes that such education, at times, can be acquired outside of school. Both boys likewise hold the opinion that a union card is about as valuable as a diploma.

The boys are only following in the footsteps of their father. He was a worker in the coal mines of Pennsylvania, and later became secretary-treasurer of the United Mine Workers of America.

## White House Chief Usher Talks of Presidents

"KE" HOOVER, chief usher at the White House, is now serving his sixth administration, counting as two the Roosevelt "double-header," as he terms it. He began as an usher during the term of Benjamin Harrison, was retained by Grover Cleveland and every succeeding president.

Hoover's present post is an important one, as all White House visitors will agree, particularly those favored with private audiences with the president in the executive mansion proper. Perhaps no man living has had a better opportunity to observe the characteristics and the human side of presidents during the last quarter of a century.

Still a young man, Hoover probably will see many more presidents come and go. As might be supposed, he is not talkative and rarely does he reveal even in the slightest degree the opinions he has formed of the nation's rulers he has been privileged to present to thousands of distinguished callers. He was in an exceptional mood the other day, however, when he came upon a friend studying the oil painting of President Wilson, which hangs with those of McKinley, Roosevelt, and Taft in the main hall of the White House. Asked if he thought the painting did President Wilson justice, Hoover replied:

"It did when he posed for it. The custom is to perpetuate the features of the president in oil as soon after his inauguration as possible. The features of Woodrow Wilson in that frame are not those of the Woodrow Wilson of today. Nearly four years have elapsed since that painting was finished. He has a stronger face now than he had then. That has been true of every president I have known. They all grow on the job, and as the years pass their faces show it."

## Water Supply of Washington Was Threatened

PRECAUTIONS were taken by the war department recently to guard Cabin John bridge from attacks threatening the city water supply, and then placed strict censorship on the news thereof. The only admission officials would make was that extra civilian guards had been employed to patrol the bridge and the nine miles of conduit road along which the pipes supplying Washington with water are placed.

Secretary of War Baker said he had never heard that letters had been received threatening to dynamite the bridge. Col. C. A. F. Flagler, engineer officer in charge of the Washington aqueduct, also denied knowledge of threatening letters. Colonel Flagler denied positively that holes had been found at the four bases of the bridge, indicating that plans had been made to dynamite the structure. An investigation, he said, showed that this story was without foundation.

Widespread interest was aroused in the reported threats against Cabin John bridge because of its vulnerability and the realization that any attack on the bridge would wholly cut off Washington's only water supply. Such an attack would not only cause inconvenience to the people, but would result in the almost complete suspension of governmental activities and conduits, that prompted the extra precautions to guard the bridge and conduits.

Efforts have been concentrated toward protecting the bridge, it is understood, because it is the one point in the piping system from Great falls at which an attack might cause serious damage and result in long delays in restoring a cut-off in the water supply.

## Army Could Not Feed Its Six Red Cross Dogs

CAPT. GORDON JOHNSTON of the Eleventh cavalry recently presented to the army medical department six dogs of a breed used in foreign armies for Red Cross work, but it is found that the war department has no funds at its disposal that are available for maintaining the dogs.

The dogs were sent to Fort Ethan Allen, Vt., and the commanding officer of ambulance company No. 1 at that place was directed to care for and train them. Then was presented the question of drawing rations for the dogs, it being found that they required six quarts of milk and four loaves of bread daily. An effort was made by the medical officer to obtain an allowance of 20 cents a day per dog to be provided for out of the appropriation for horses and other draft animals. The accounting officers of the treasury held that this cannot be done, and also that the contingent fund of the army was not available for the purpose. It was thought that perhaps the medical department appropriation might be used, since that had been given a very liberal interpretation as authorizing "the purchase of anything necessary for the medical and hospital service for which no more specific provision has been made elsewhere," but the comptroller decided that the maintenance of the dogs had too remote a bearing upon medical care and treatment or the miscellaneous expense of the service to warrant an extension of such a principle to the purpose.

The secretary of war approved the recommendation of the general staff that, unless the medical department can maintain the dogs without expense to the government—which the comptroller now says is impossible—they be returned to the donor.

## FROM OVER THE WORLD

Sixty families of the Maisons Alfort suburb of Paris have received assignments of uncultivated land for planting potatoes and other vegetables, the action being under a decree by the French minister of agriculture. This is the first practical application of the measures adopted for the utilization of all previously uncultivated lands.

Uruguay has organized a government institute of geology with a director and assistants from the United States.

The government of South Africa has erected a large sugar mill to encourage the cultivation of cane in Zululand.

The Argentine government has made a large appropriation to finance a campaign against locusts, chiefly by propagating parasites of the insects.

Sixty million iron half-pennies are now being coined in Germany to replace copper coins, which are being withdrawn from circulation.

# DAIRYING IN WESTERN CANADA

Accompanying Industries Also  
Prove Highly Profitable.

The cheese industry throughout western Canada today is in a highly flourishing condition and is bound in a very short time to become much more important. The war has created a great demand for that article, and its use abroad has given it a lot of useful advertising. The article known as Canadian cheese is now sought not only by the soldier in the trenches, but by the ordinary civilian consumer, who, having used it, is quick to appreciate its value. This means that after the war there will be a demand greater for it than would not otherwise have been. Up to the present the war needs have limited the local supply, but with the increased effort that is now being put forth it is hoped that this will be met. As a matter of course the prices are high, and the farmers who contribute to the cheese factories are making money.

The cheese season is now fully open and there is every prospect of an excellent year because the high price which obtained last year will undoubtedly be maintained this season. Western Canada has all the natural resources for the making of cheese, the feed and the cool nights, two things essential, and in time it is bound to become one of the finest cheese countries of the continent.

The lower foothills of Alberta, used only at the present time as ranges or for no purpose, will in time produce cheese in great quantities, and doubtless will soon equal the famous uplands of Denmark.

The cool nights mean the better keeping of milk and cream and cheese, and that is a great thing for the industry, especially when combined with possibilities of cattle feed such as exist on the long slopes from the Rockies eastward.

The hog market, which may be classed as an adjunct of farming, is an exceedingly good one, and the low cost at which the feed can be produced, coupled with the high prices realized, make this industry very profitable.

One of the first thoughts that occur to the mind of the average prospective settler is the likelihood of suitable markets. In this connection the following table will be illuminating. It is supplied by the P. Burns company, packers and exporters, of Calgary, and shows the average monthly price paid for hogs for the six years 1910 to 1915 inclusive. When one considers the low initial cost of the land and the small overhead cost of maintenance and feed, these prices challenge comparison.

	1910	1911	1912	1913	1914	1915
January	7 3/8	8	7 3/8	8 1/2	8 1/2	8 1/2
Feb.	7 3/8	8 1/4	8 1/4	8	8 1/4	8 1/4
March	7 3/8	8	8 1/4	7 3/8	7 3/8	7 3/8
April	7 3/8	8 1/4	8 1/4	7 3/8	7 3/8	7 3/8
May	7 3/8	8	8 1/4	7 3/8	7 3/8	7 3/8
June	7 3/8	8 1/4	8	8 1/4	8 1/4	8 1/4
July	7 3/8	8 1/4	8	8 1/4	8 1/4	8 1/4
August	7 3/8	8 1/4	8 1/4	8 1/4	8 1/4	8 1/4
Sept.	7 3/8	8 1/4	8 1/4	8 1/4	8 1/4	8 1/4
Oct.	7 3/8	8 1/4	8 1/4	8 1/4	8 1/4	8 1/4
Nov.	7 3/8	8 1/4	8 1/4	8 1/4	8 1/4	8 1/4
Dec.	7 3/8	8 1/4	8 1/4	8 1/4	8 1/4	8 1/4

A farmer of Monarch, Alberta, claims the distinction of being the first in the province to sell a carload of hogs at the high price of eleven cents a pound, live weight. The sale was made a short time ago at Calgary, and at that time was a record, although prices have since gone as high as \$11.12 1/2 per hundredweight. With such prices available for hogs the farmer has a market for everything his farm produces, as there is practically no farm product which cannot be converted into good hog flesh. The uncertainty of results which attends grain farming even under most favorable conditions is removed when the settler goes in for raising hogs, beef and dairy products. With Western Canada's cheap lands, heavy crops, and climate free from diseases of stock, the stock farmer is as sure of success as anyone can be.—Advertiser.

Forehand, Estelle, how you could draw all your money out of the bank and spend it, when I specially told you that I wouldn't be able to give you any more for some time? Wife—But I did it on purpose, dear. Suppose the bank should fail?—Life.

## A Brooklyn Druggist Praises the Great Kidney Remedy

I have handled Dr. Kilmer's Swamp-Root, kidney, liver and bladder remedy for twenty years and have heard plenty of favorable reports concerning it from my customers. They are satisfied with the results obtained from its use. I know of many cases where Swamp-Root has cured Stone in the Bladder, Gall Stones, Gravel, Catarrh or Inflammation of Bladder, Liver trouble and Rheumatism. I have used it in my own family with good results; and I heartily endorse Dr. Kilmer's Swamp-Root and believe it has good curative value.

Very truly yours,  
ALEX. LIPSCHITZ, Druggist,  
84 North 6th Street,  
Brooklyn, N. Y.

November 12th, 1915.  
Prove What Swamp-Root Will Do For You  
Send ten cents to Dr. Kilmer & Co., Binghamton, N. Y., for a sample size bottle. It will convince anyone. You will also receive a booklet of valuable information, telling about the kidneys and bladder. When writing, be sure and mention this paper. Regular fifty-cent and one-dollar size bottles for sale at all drug stores.—Adv.

A woman never misses an opportunity to boast of her influence over some man.

COVETED BY ALL  
but possessed by few—a beautiful head of hair. If yours is streaked with gray, or is harsh and stiff, you can restore it to its former beauty and luster by using "La Creole" Hair Dressing. Price \$1.00.—Adv.

For every electric automobile made in 1915 there were 120 gasoline cars.

## GATHERED FACTS

France is stimulating attention to gardening.

Persons with blue eyes are supposed to be immune to color blindness.

Visiting cards made of sheet iron were one of Baron Krupp's specialties. It is said that a single drop of nicotine will kill a rabbit in three and a half minutes.

A watch requires 175 separate parts, more than 2,400 operations being necessary in its manufacture.

Electrical apparatus taking current from a light socket has been invented by a French scientist to pump it into a reservoir and washing it.

To enable his automobile to run over deserts and sandy roads a Californian has equipped it with canvas belts which revolve around the rear wheels, providing smooth tracks.

A new rack for toothbrushes has places in front in which can be inserted cards showing the names of the owners of the brushes.

A new French motorcycle has been given a fourteen horse-power engine by its inventor.

An English sportsman's yacht is so built that his automobile can be lowered into it to provide power.

Queen Elena of Bulgaria is said to have expended her entire personal fortune for the relief of her subjects.

An automobile has been invented in which the power is transmitted from the engine shaft to the driving shaft by a magnet without any mechanical connection between them.